



# Acceler8 Update

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**Governing Board Workshop**  
**West Palm Beach, Florida**  
**September 12, 2006**



# Presentation Summary

- **Construction Update**
- **C-44 Preliminary Design**
- **Picayune Strand – Levees, Canals & Roads Preliminary Design**
- **Finance**



# Acceler8 Construction Update

September, 2006

## In Construction: \$145.1 Million

• C-43 Test Cells (Barnard)	\$ 10.2 Million	99 % complete
• C-44 Test Cells (Barnard)	\$ 9.0 Million	97 % complete
• STA 2 Expansion (Gulf Group)	\$ 18.7 Million	68 % complete
• STA 5 Expansion (Interlaken)	\$ 12.9 Million	73 % complete
• STA 6 Expansion (Harry Pepper)	\$ 23.4 Million	53 % complete
• Picayune - Demolition (Cross)	\$ 1.5 Million	9 % complete
• Acme Basin B (Harry Pepper)	\$ 13.3 Million	5 % complete
• Picayune – Prairie Canal (GlobeTec)	\$ 2.4 Million	2 % complete
• EAA Reservoir – GMP#1 (BPJV)	\$ 53.7 Million	1 % complete

## Upcoming Projects:

– Picayune – Road Removal	\$ 3.9 Million
– Troop Indiantown Temporary Reconfiguration	\$ 1.0 Million (bid)
– Site 1 S-527B Construction	\$ 1.6 Million (re-bid)

## C-43 West Storage Reservoir Test Cell Pilot Project

### Current Status

- NTP: January 16, 2006
- Substantial Completion I: June 14, 06
- Final Completion: April 16, 2007
- Construction Contract: \$10.2 Million
- Change Orders \$ 22 K  
Total: \$10.2 Million
- % Complete Time: 50 %  
(days since NTP / total contract)
- % Complete Dollars: 99 %  
(Pay Apps / total contract)
- Major Issues To Date: None



### WORK THIS PERIOD

- Sub. Completion I on 6/9/06
- Filling completed 6/13/06
- Monitoring test cell instrumentation until April 07



## C-44 Reservoir Test Cell Pilot Project

### Current Status

- NTP: February 16, 2006
- Substantial Completion III: Jun 06
- Final Completion: July 7, 2007
- Construction Contract: \$ 9.0 Million
- Change Orders: \$ 0.0  
Total: \$ 9.0 Million
- % Complete Time: 40%  
(days since NTP / total contract)
- % Complete Dollars: 97%  
(Pay Apps / total contract)
- Major Issues To Date: None



### WORK THIS PERIOD

- STA and test cells filled in June
- Demob construction equipment
- Monitoring test cell instruments



## STA 2 Cell 4 Expansion Project

### Current Status

- NTP: January 11, 2006
  - Substantial Comp I: Nov 7, 2006
  - Final Completion: July 19, 2007
  - Construction Contract: \$ 18.7 Million
  - Change Orders: (\$ 26 K)  
Total: \$ 18.7 Million
- 
- % Complete Time: 76%  
(days since NTP / SC-1)
  - % Complete Dollars: 68%  
(Pay Apps / total contract)
- 
- Major Issues To Date: Additional Dewatering Pumps Required



### WORK THIS PERIOD

- G337A concrete work completed and gates hung
- Discharge canal 70% complete
- Installing gates on all inflow structures



## STA 5 Flow-way 3 Expansion Project

### Current Status

- NTP: January 19, 2006
- Substantial Comp I: Nov 21, 2006
- Final Completion: April 26, 2007
- Construction Contract: \$ 12.9 Million
- Change Orders: (\$ 4.0 K)  
Total: \$ 12.9 Million
- % Complete Time: 72%  
(days since NTP / SC-1)
- % Complete Dollars: 73%  
(Pay Apps / total contract)
- Major Issues To Date: None



### WORK THIS PERIOD

- 99% complete on east perimeter levee
- Finalizing structures and walls; awaiting gate installation
- East discharge canal completed
- Interior levee 85% complete



## STA 6 Section 2 Expansion Project

### Current Status

- NTP: February 7, 2006
- Substantial Compl I: Dec 8, 2006
- Final Completion: May 21, 2007
- Construction Contract: \$ 23.4 Million
- Change Orders: (\$ 23.0 K)  
Total: \$ 23.4 Million
- % Complete Time: 65%  
(days since NTP / SC-1)
- % Complete Dollars: 53%  
(Pay Apps / total contract)
- Major Issues To Date: Cultural Resource Double Berm construction



### WORK THIS PERIOD

- Structure gates being installed on G352A; G396A box culverts installed
- Spreader canal 90% complete
- West inflow canal 95% complete



## Picayune Strand – Demolition

### Current Status

- NTP: July 6, 2006
- Final Completion: April 1, 2007
- Construction Contract: \$ 1.47 Million
- Change Orders: 0  
Total: \$ 1.47 Million
- % Complete Time: 18%  
(days since NTP / total contract)
- % Complete Dollars: 9 %  
(Pay Apps / total contract)
- Major Issues To Date: None



### WORK THIS PERIOD

- Continued with removal of wells and septic systems
- Material staging area established
- 30 parcels cleared overall



## Acme Basin B Discharge, C-1 and PS-7

### Current Status

- NTP: July 7, 2006
- Substantial Comp. I: Dec 29, 2006
- Final Completion: June 7, 2007
- Construction Contract: \$ 13.3 Million
- Change Orders: \$ 0  
Total: \$ 13.3 Million
- % Complete Time: 18 %  
(days since NTP / total contract)
- % Complete Dollars: 5 %  
(Pay Apps / total contract)
- Major Issues To Date: Relocate  
Pump Station



### WORK THIS PERIOD

- Completed clearing and grubbing
- Performed dewatering to support excavation and clearing of canal
- Local resident meetings
- Canal upgrade 40% complete



## Picayune Strand – Prairie Canal Backfilling

### Current Status

- NTP: August 14, 2006
- Substantial Compl I: May 11, 2007
- Final Completion: June 10, 2007
- Construction Contract: \$ 2.18 Million
- Change Orders: \$ 0  
Total: \$ 2.18 Million
- % Complete Time: 6 %  
(days since NTP / total contract)
- % Complete Dollars: 0 %  
(Pay Apps / total contract)
- Major Issues To Date: None



### WORK THIS PERIOD

- NTP provided and Pre-Construction meeting held
- Contractor mobilized equipment
- Clearing and grubbing operations started
- 8 plugs completed to date



# Acceler8 Project Allowance

- **Historically the District budgeted a program contingency to fund construction change orders**
  - This procedure required time intensive budget transfers from the contingency fund to the project
- **To expedite funding of changes and avoid potential contractor delay claims Acceler8 contracts have included up to a 10% allowance as a bid item**

# Acceler8 Project Allowance

- **No change in current change order approval levels (over \$500,000 and/or 90-day extension requires District Leadership Team approval)**
- **Acceler8 signature level for change order authorization based on amount**
- **Procurement director or designee has final approval**
- **Allowance utilization reported to Governing Board similar to any other change order**
- **Documentation and accountability is maintained**

# Project Allowance Benefits

- Minimize delay claim costs
- Reduce processing time
- Improve documentation of change order
- Improve accountability trail
- Does not change current change order approval levels
- District maintains full control over allowance

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT



## DISCUSSION



# **C-44 Reservoir/Stormwater Treatment Area (STA) Project**

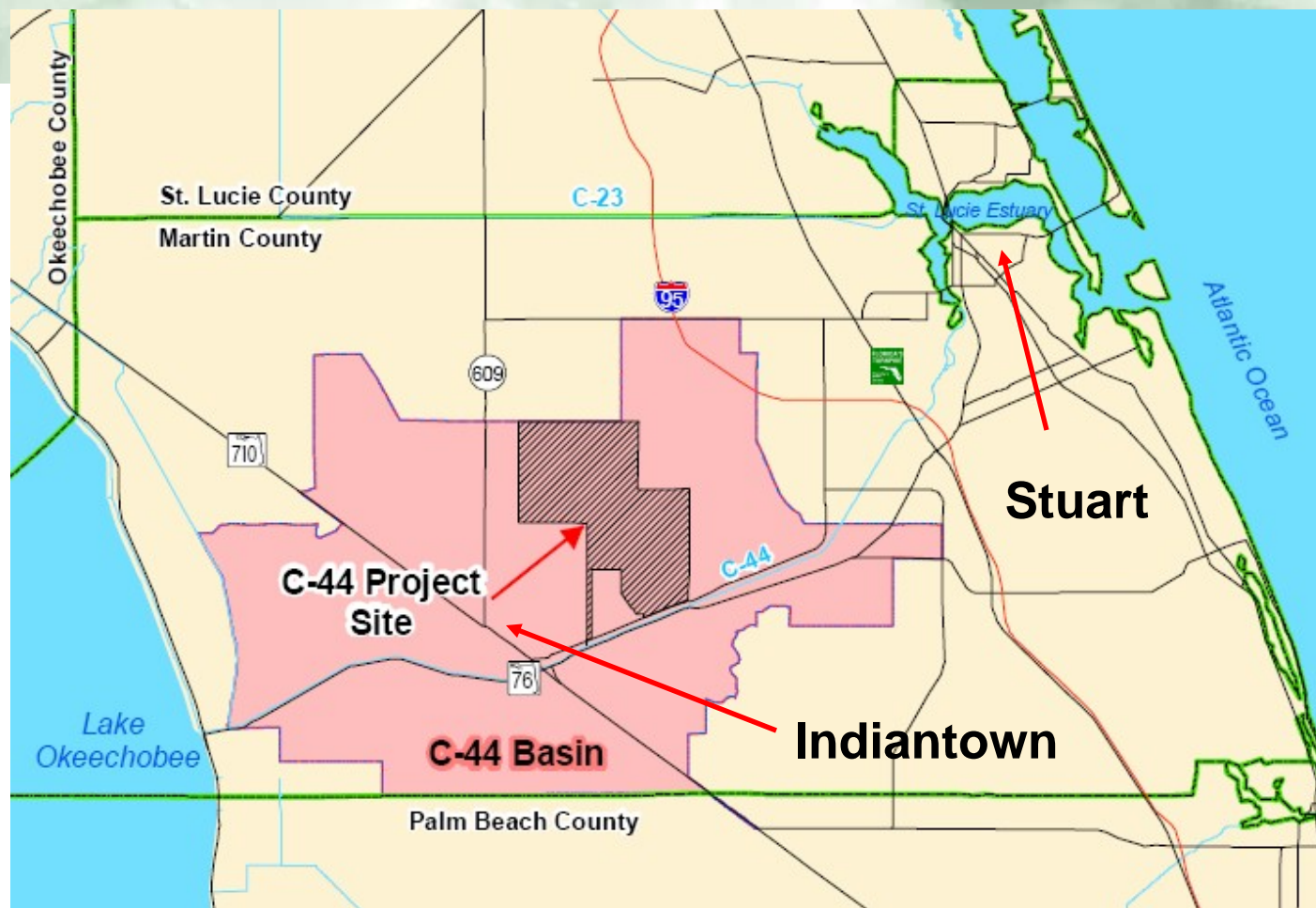
## **Governing Board Workshop**

*September 6, 2006*

# Preliminary Design Update

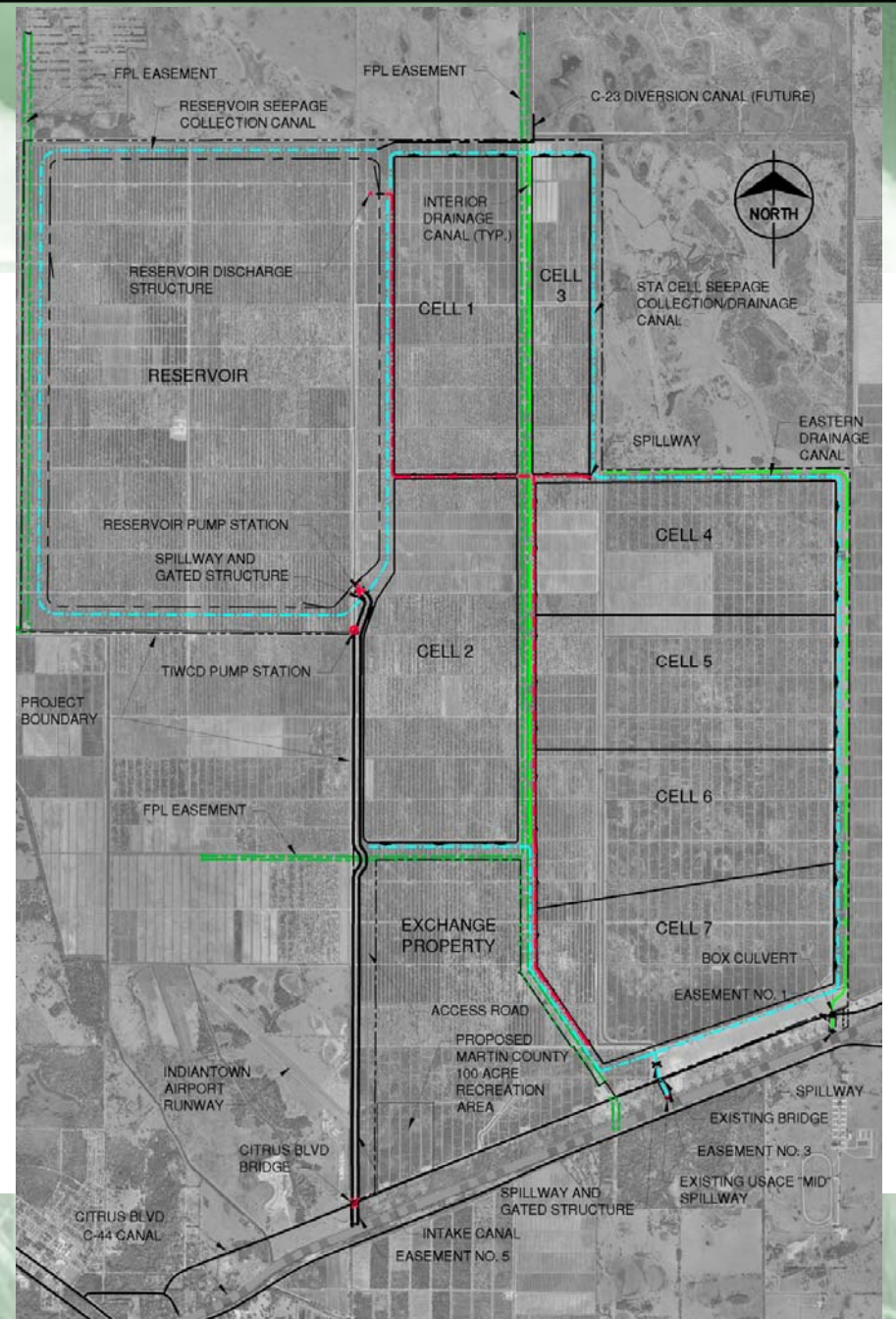
- C-44 Reservoir/STA Project Overview
- Changes Since Basis of Design Report (BODR)
- Recreational Features
- Stakeholder Comments
- Schedule and Budget

# C-44 Reservoir/STA Project Location



# Changes Since BODR

- Deleted Lands to Southwest
- Added Lands to Northeast
  - Still 12,000 acre Project Site
- Additional 100 acres of STAs
- Moved Reservoir Discharge Structure North
- Deleted Reservoir Internal Dike

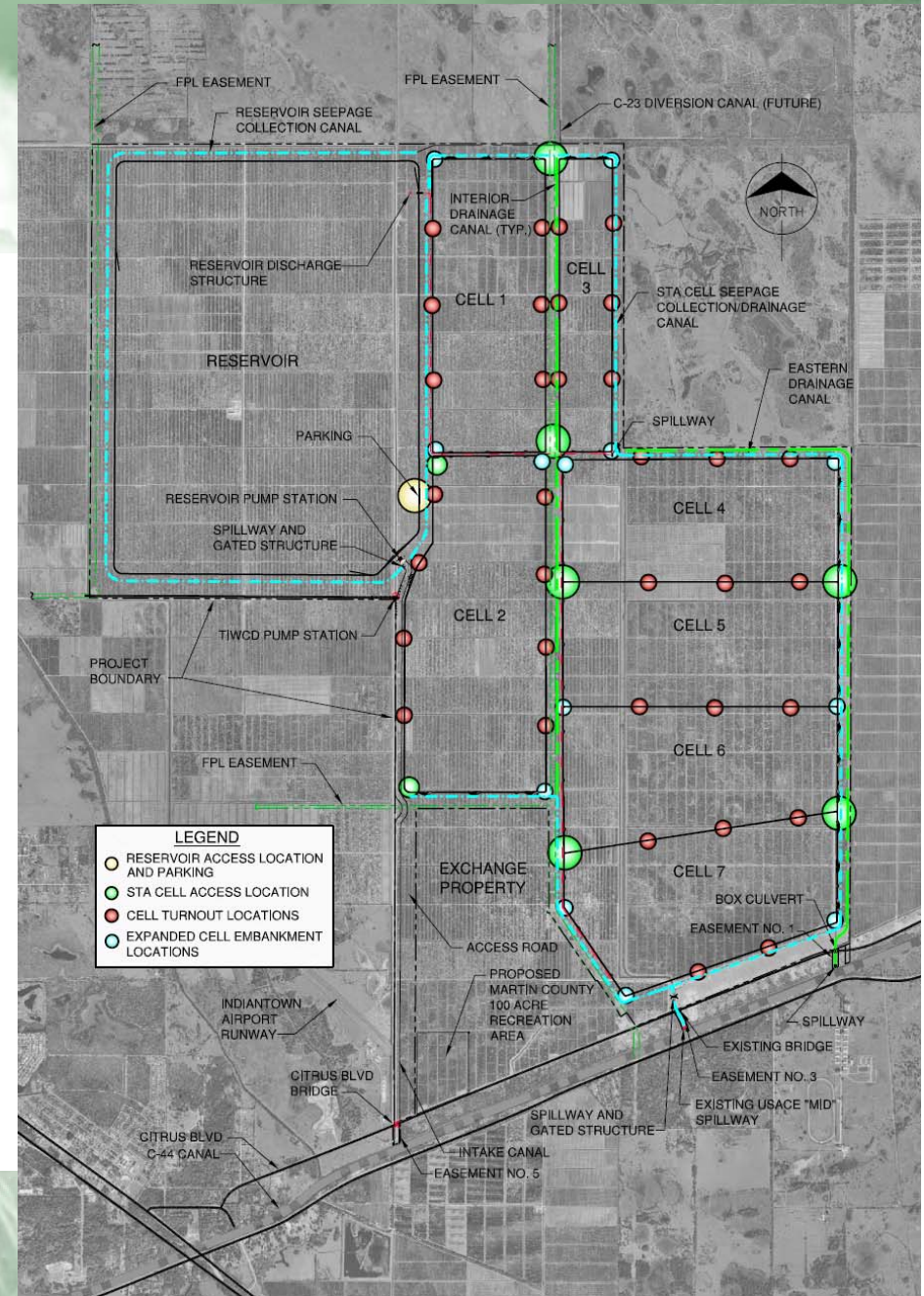


# C-44 Reservoir and STA Test Cells



# Recreation/Access Opportunities

- Reservoir Access
- Parking
- STA Cell Access
- STA Expanded Corners
- STA Cell Turnouts



## Stakeholder Comments

- Larger Reservoir
- Local Drainage Issues
- Recreational Opportunities
- Concerns about Sending Water North to C-23 Basin
- Safety
- 4-Lane Bridge Over Citrus Boulevard

# C-44 Project Schedule and Budget

## Schedule

- Construction Start – October 2006
  - Temporary Reconfiguration of Troup Indiantown Water Control District
- Final Design & Bid Package Complete – March 2007
- Reservoir and STA Construction Start – June 2007
- Construction Complete – December 2009

## Budget

- Project Budget Excluding Land - \$339.8 million

# QUESTIONS

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

# PICAYUNE STRAND RESTORATION PROJECT

Basis of Design Report-Levees, Canals and Roads

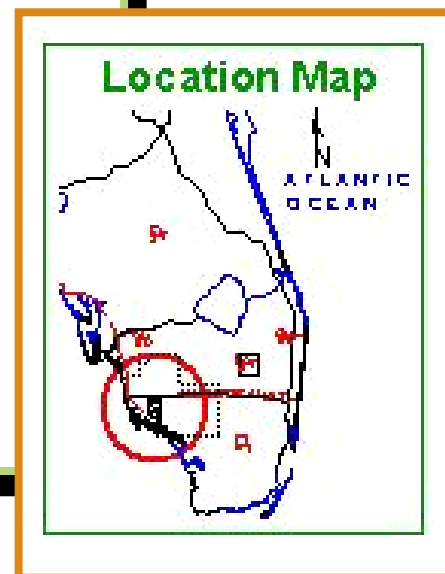
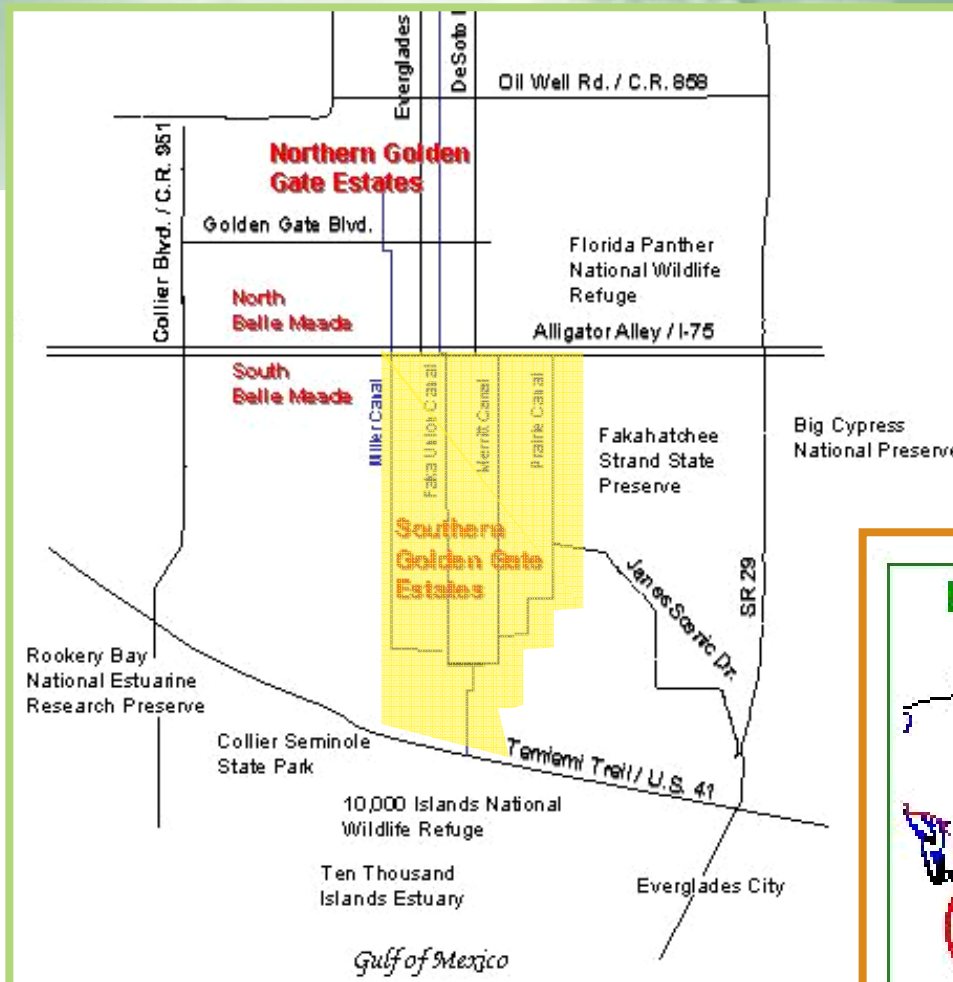
**Governing Board Workshop**  
**September 12, 2006**



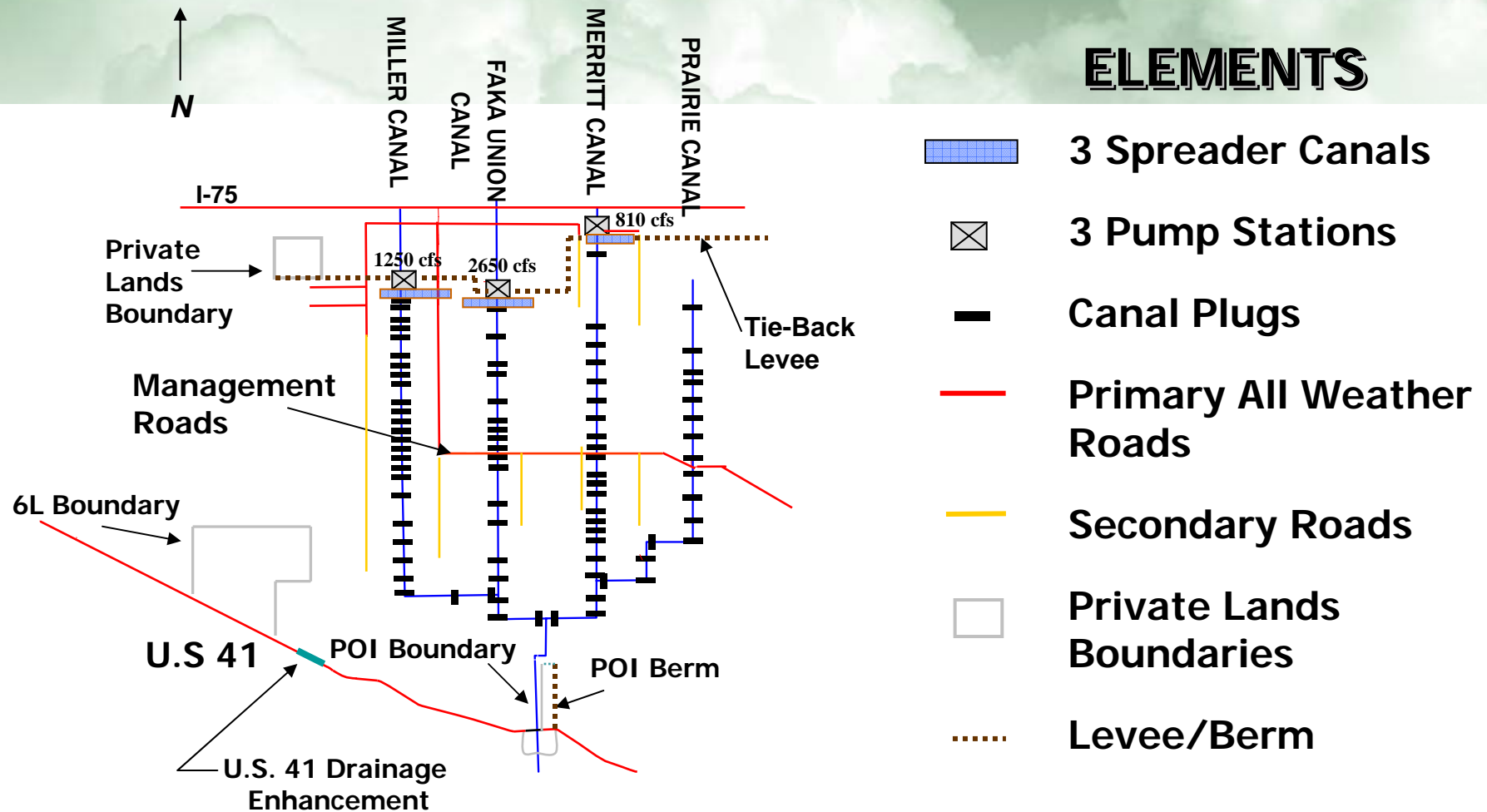
## **Basis of Design Report for Levees, Roads, and Canals**

- **Overview**
- **Changes from Project Implementation Report**
- **Cost**
- **Schedule**
- **Stakeholder Concerns**
- **Value Engineering Recommendations**

# Project Area



# BODR Recommended Plan



## Changes from Project Implementation Report

- Continuous levee upstream from spreader system
- Spreader system is above ground and uses spillways to direct flow to natural flow ways
- Protection levees not required for most private properties
- Additional drainage features on US41

# Construction Costs

Project Component	Current Budget	PIR Estimate
Pump Stations	\$99.9M	\$67.5M
LCR	\$53.6M	\$58.0M

## LCR Schedule

- **Draft BODR July 14th**
- **Preliminary Design Nov 06**
- **Complete Design Mar 07**
- **Start Construction July 07**
- **Construction Complete Aug 09**
  - Levees and/or flood protection measures
  - Pump Stations
- **Canal plugs will be installed after pump station operational testing is complete**

## Current Progress

- **Pump Stations Design at 60%+**
- **H&H Modeling Nearing Completion**
- **Survey and Geotechnical Investigations**
- **Demolition of Existing Structures**
- **Prairie Canal Plugging**
- **Road Removal - Late September**

## **Stakeholder Issues and Concerns**

- **Optimize Restoration**
- **Consider Recreational Activities**
- **Work with Division of Forestry on Road Design**
- **Perform Additional Design to Confirm BODR Findings**
- **Determine Impacts of Ground and Surface Water**

# Value Engineering

- **Accepted Good Engineering Practice**
  - High level analysis and estimating
  - Primarily considers cost saving issues
  - Project function does not change
- **Found Several Areas for Further Study**
  - Combine three pump stations into one or two facilities (up to \$37MM)
  - Modify pump discharge piping (~\$7.5MM)
  - Modify pump suction design (~\$6.5MM)
  - Use screw pump instead of impeller style (~\$28MM)
  - Reduce number of pumps (~\$7MM)

# **Value Engineering**

## **Path Forward**

- 1) Suspend pump station design activity**
- 2) Conduct “fatal flaw” analysis**
- 3) Confirm project still meets original goals**
- 4) Prepare detailed cost estimates**
- 5) Reject or Implement**

# QUESTIONS